

## **Hearing Users' Voices**

### **How NAS used the results of the 2011 User Survey to improve performance**

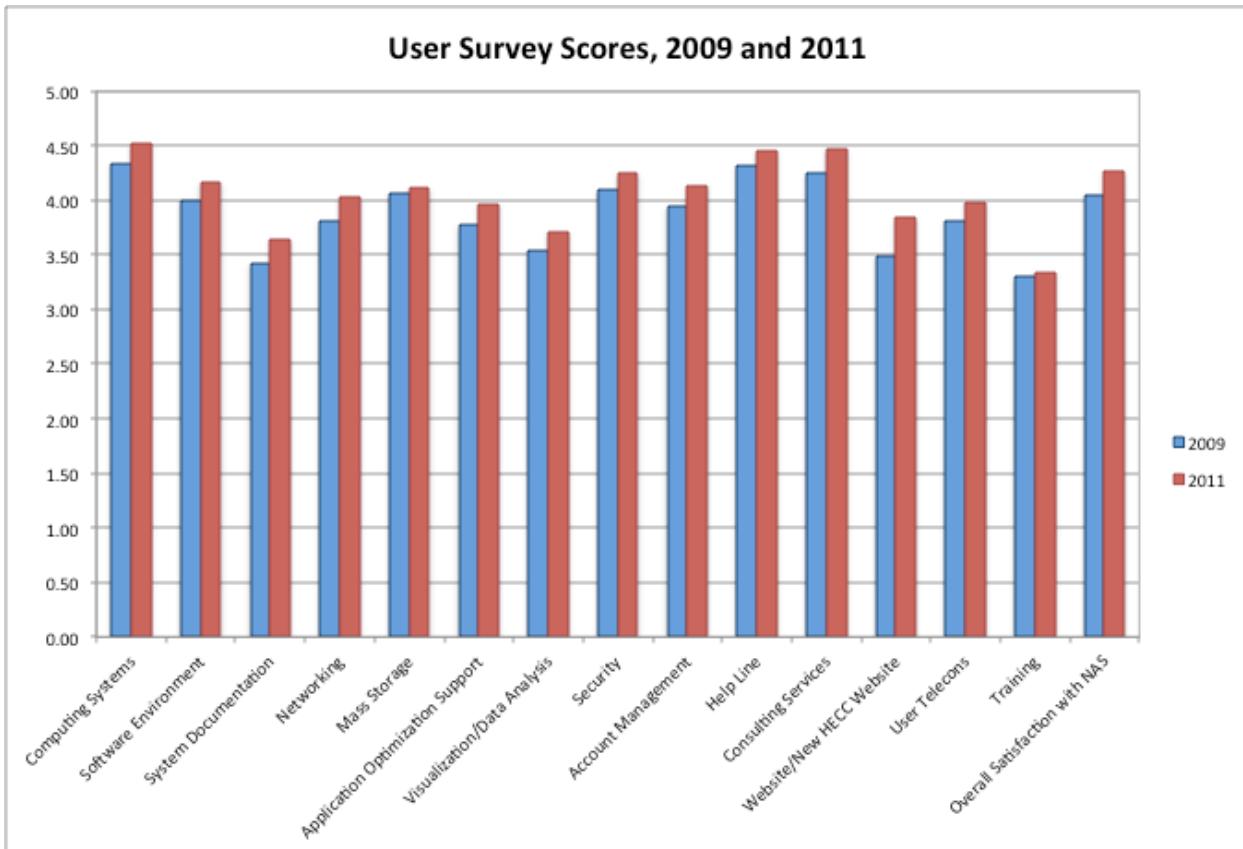
As many of you will remember, last year at about this time we conducted a user survey, following up on the survey we conducted in 2009. Over 25% of our users responded to the survey, providing a wealth of feedback that we have used over the past year to guide a broad range of improvement efforts.

It is especially gratifying that most of those who responded took the time to enter comments in the “open ended” questions. These comments are extremely valuable in giving us deeper insight into your needs and concerns.

We are pleased to report that overall satisfaction with our services is high and that scores went up slightly in all areas compared to the 2009 survey. As in 2009, Computing Systems received the highest score – the very heart of our service offerings.

We are particularly pleased that the website showed the largest increase in score; and as discussed below, we continue to put a lot of effort into making it even better. Also, we note that our score for training was close to unchanged; and here, too, we have placed great emphasis on improving. We really want to improve your training experience!

This graph shows the 2011 and 2009 average of the scores from all responses for 14 service areas, as well as for Overall Satisfaction. On the graph, scores of 1 through 5 correspond to Poor, Fair, Good, Very Good and Excellent, with 1 corresponding to Poor, and 5 corresponding to Excellent. So – our score of 4.26 for Overall Satisfaction is Very Good; eight of the service areas scored at least Very Good, and the other six were between Good and Very Good.



Of course, numbers don't tell the whole story. Your comments about what we are doing well and where we need to improve have helped us focus our efforts. We analyzed your comments and assigned teams of senior managers to use these comments in updating our plans for ongoing upgrades and improvements. We hope you have already seen some results. We would like to highlight some of the actions we have taken as well as areas where you can expect to see more. While these actions are not based solely on the user survey results, your feedback has been a major influence on our priorities!

#### Mass Storage & Networking

The work you do is getting more and more data intensive, and that means that you need ongoing improvements in services to help you store, access and move data. We assigned a team to focus on this area and have taken several steps, including:

- We nearly doubled the size of the /nobackup filesystem to 9.3 PB and increased Lustre file system quotas, giving you more default storage space. We also added more information about how to request additional quota space to the website and knowledge base.
- We upgraded the Lustre disk controllers, delivering a tenfold increase in I/O performance, which should be speeding up your codes.
- We increased the size of the disk cache to 4.2 PB – a factor of 5.25, and extended the new, higher speed (about 7 GBytes/sec.) FDR InfiniBand fabric to the archive systems. Significant I/O improvement will be realized with the upcoming parallel Data Migration Facility upgrade.

## Website

Although we have made good progress in improving the website and user documentation, particularly with the introduction of the Knowledge Base, you told us that you wanted us to do more. We are working to make our documentation even easier to use and to make it easier to find things on the website. Our team is evaluating user feedback on the structure of the website and is studying usage patterns so we can optimize the website and the search experience. We are continually adding articles to the Knowledge Base, with almost 250 articles to date—and we revised the New User Orientation guide to help new users get started.

## Training

Likewise, we have added user training offerings, including courses specifically aimed at helping new users get started using our services. We provided training on tools to improve data transfer performance, including general data transfer techniques and how to use SUP/SHIFT and VNC. We also beefed up training on the account request process. Our new webinars have proven to be very popular. About a dozen webinars are available now (you can replay them anytime from our website) and many more are planned. We even had to upgrade our Webex to allow for larger virtual crowds!

## Data Analysis & Visualization

Your comments reinforced just how important post-analysis and visualization are to you. We are exploring ways we can enhance our data analysis capabilities and services. We have added large-memory nodes and we are working to improve the process for managing licenses based on analysis of usage. We are investigating options for additional Matlab and IDL licenses. In addition, we provided new VNC documentation and training.

The user survey is very important to us – the process of working through the results has been very valuable to everyone at NAS in our ongoing efforts to provide you with world-class services. Be on the lookout for the next survey early in 2013.

And as always, we need and value your input, not only when we do surveys, but year round. Please call, send email, or join our weekly user telecons.